

Message

From: Partridge, Charles [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=27DA56DA9A12472787EF56077099CF36-PARTRIDGE, CHARLES]
Sent: 12/4/2019 5:30:35 PM
To: Dorian, David (ATSDR/DCHI/WB) [irs1@cdc.gov]
Subject: Re: Manganese, Zinc and Copper and their impact on Human Health in Butte. New Information Reported in today's Montana Standard

I'll be at airport in 30 and have 1.5 hrs until flight. Call at 11?

Cp

Sent from my iPhone

> On Dec 4, 2019, at 10:28 AM, Dorian, David (ATSDR/DCHI/WB) <irs1@cdc.gov> wrote:
>
> Sorry we got cut off...I know you are on the road.
>
> While I realize funding/study design etc would be quite the hurdle, an interesting approach would be to analyze cord blood and compare it to the cord blood data base that Mailman (Columbia U) maintains, assuming they measure for some of the same constituents. Again, unlikely.
>
> Kai wants to touch base with you and I on the phone. .. can you suggest a good time soon?
> Best,
> David
>
> From: Stokes IV, Shereitte (CDC/DDPHSIS/CSTLTS/OD) <zyz8@cdc.gov>
> Sent: Monday, December 2, 2019 12:52 PM
> To: Elgethun, Kai (ATSDR/DCHI/WB) <irz6@cdc.gov>; Dorian, David (ATSDR/DCHI/WB) <irs1@cdc.gov>; Williamson, Laura (CDC mt.gov) <lwilliamson@mt.gov>; Ferguson, Matthew <Matthew.Ferguson@mt.gov>; Garrett, Connie <Connie.Garrett@mt.gov>
> Cc: Wendel, Arthur (ATSDR/DCHI/WB) <dvq6@cdc.gov>
> Subject: RE: Manganese, Zinc and Copper and their impact on Human Health in Butte. New Information Reported in today's Montana Standard
>
> Thanks David and Kai. In terms of the follow-up question, I was told the following:
>
> If you have a baseline level of the individual metals in infant blood, then the excess levels in meconium could correlate with those in the blood.
>
> Shereitte C. Stokes IV, PhD, MPH, MIAD
> Environmental Health Scientist
> Technical Project Officer | Division of Community Health Investigations
> Agency for Toxic Substances and Disease Registry
> 4770 Buford Hwy NE, MS S102-1
> Atlanta, GA 30341-3717
> O: (404) 498-0376 | •: zyz8@cdc.gov<mailto:zyz8@cdc.gov>
> [apple tree logo]<https://cdcpartners.sharepoint.com/sites/NCEH/ATSDR/DCHI/CAP>
>
> From: Elgethun, Kai (ATSDR/DCHI/WB) <irz6@cdc.gov<mailto:irz6@cdc.gov>>
> Sent: Monday, December 2, 2019 2:51 PM
> To: Dorian, David (ATSDR/DCHI/WB) <irs1@cdc.gov<mailto:irs1@cdc.gov>>; Stokes IV, Shereitte (CDC/DDPHSIS/CSTLTS/OD) <zyz8@cdc.gov<mailto:zyz8@cdc.gov>>; Williamson, Laura (CDC mt.gov) <lwilliamson@mt.gov<mailto:lwilliamson@mt.gov>>; Ferguson, Matthew <Matthew.Ferguson@mt.gov<mailto:Matthew.Ferguson@mt.gov>>; Garrett, Connie <Connie.Garrett@mt.gov<mailto:Connie.Garrett@mt.gov>>
> Cc: Wendel, Arthur (ATSDR/DCHI/WB) <dvq6@cdc.gov<mailto:dvq6@cdc.gov>>
> Subject: RE: Manganese, Zinc and Copper and their impact on Human Health in Butte. New Information Reported in today's Montana Standard
>
> My experience with the EI group since 2006 is that they avoid all other matrices, including hair and nail analysis.
> David is right, the fundamental question is one of plausibility of site-related exposure being a significant contributor.
>
> From: Dorian, David (ATSDR/DCHI/WB) <irs1@cdc.gov<mailto:irs1@cdc.gov>>
> Sent: Monday, December 2, 2019 12:34 PM
> To: Stokes IV, Shereitte (CDC/DDPHSIS/CSTLTS/OD) <zyz8@cdc.gov<mailto:zyz8@cdc.gov>>; Williamson, Laura (CDC mt.gov) <lwilliamson@mt.gov<mailto:lwilliamson@mt.gov>>; Ferguson, Matthew <Matthew.Ferguson@mt.gov<mailto:Matthew.Ferguson@mt.gov>>; Garrett, Connie <Connie.Garrett@mt.gov<mailto:Connie.Garrett@mt.gov>>

> Cc: Elgethun, Kai (ATSDR/DCHI/WB) <irz6@cdc.gov<mailto:irz6@cdc.gov>>; Wendel, Arthur (ATSDR/DCHI/WB) <dvq6@cdc.gov<mailto:dvq6@cdc.gov>>
> Subject: RE: Manganese, Zinc and Copper and their impact on Human Health in Butte. New Information Reported in today's Montana Standard
>
> That's still good information. The follow up question then would blood or urine be an effective way to determine if there are unusual exposures to the three metals identified in the meconium study.
>
> On a separate note, the EI basis also would lead us to ask, "is there evidence of a completed exposure pathway for the contaminants identified?" I am not well enough versed in Butte history, but we might start there in our discussion.
>
>
> From: Stokes IV, Shereitte (CDC/DDPHSIS/CSTLTS/OD) <zyz8@cdc.gov<mailto:zyz8@cdc.gov>>
> Sent: Monday, December 2, 2019 12:26 PM
> To: Williamson, Laura (CDC mt.gov) <lwilliamson@mt.gov<mailto:lwilliamson@mt.gov>>; Dorian, David (ATSDR/DCHI/WB) <irs1@cdc.gov<mailto:irs1@cdc.gov>>; Ferguson, Matthew <Matthew.Ferguson@mt.gov<mailto:Matthew.Ferguson@mt.gov>>; Garrett, Connie <Connie.Garrett@mt.gov<mailto:Connie.Garrett@mt.gov>>
> Cc: Elgethun, Kai (ATSDR/DCHI/WB) <irz6@cdc.gov<mailto:irz6@cdc.gov>>; Wendel, Arthur (ATSDR/DCHI/WB) <dvq6@cdc.gov<mailto:dvq6@cdc.gov>>
> Subject: RE: Manganese, Zinc and Copper and their impact on Human Health in Butte. New Information Reported in today's Montana Standard
>
> Good Afternoon David,
>
> I hope this message find you well. I checked with the Exposure Investigations Group, and unfortunately there isn't anyone that has looked at meconium as a measure of exposure. I was told the following:
>
> For our group, if there is not a regulatory or health-based standard, then we generally don't consider the media in our assessment. The only biological media [that has been] considered in ATSDR Health Consultations are blood and urine.
>
> Sorry.
>
> Respectfully,
> Shereitte
>
> Shereitte C. Stokes IV, PhD, MPH, MIAD
> Environmental Health Scientist
> Technical Project Officer | Division of Community Health Investigations
> Agency for Toxic Substances and Disease Registry
> 4770 Buford Hwy NE, MS S102-1
> Atlanta, GA 30341-3717
> O: (404) 498-0376 | •: zyz8@cdc.gov<mailto:zyz8@cdc.gov>
> [apple tree logo]<<https://cdcpartners.sharepoint.com/sites/NCEH/ATSDR/DCHI/CAP>>
>
> From: Williamson, Laura <LWilliamson@mt.gov<mailto:LWilliamson@mt.gov>>
> Sent: Monday, December 2, 2019 1:58 PM
> To: Dorian, David (ATSDR/DCHI/WB) <irs1@cdc.gov<mailto:irs1@cdc.gov>>; Ferguson, Matthew <Matthew.Ferguson@mt.gov<mailto:Matthew.Ferguson@mt.gov>>; Garrett, Connie <Connie.Garrett@mt.gov<mailto:Connie.Garrett@mt.gov>>
> Cc: Elgethun, Kai (ATSDR/DCHI/WB) <irz6@cdc.gov<mailto:irz6@cdc.gov>>; Wendel, Arthur (ATSDR/DCHI/WB) <dvq6@cdc.gov<mailto:dvq6@cdc.gov>>; Stokes IV, Shereitte (CDC/DDPHSIS/CSTLTS/OD) <zyz8@cdc.gov<mailto:zyz8@cdc.gov>>
> Subject: RE: Manganese, Zinc and Copper and their impact on Human Health in Butte. New Information Reported in today's Montana Standard
>
> Thanks for organizing, David.
>
> Times that work well for the MT team are:
> Tuesday- any time after 10 am (except 12:30-1:30)
> Wednesday- any time after 10 am
> Thursday- any time except 1-2:30
>
> Laura
>
> From: Dorian, David (ATSDR/DCHI/WB) <irs1@cdc.gov<mailto:irs1@cdc.gov>>
> Sent: Monday, December 2, 2019 11:37 AM
> To: Williamson, Laura <LWilliamson@mt.gov<mailto:LWilliamson@mt.gov>>; Ferguson, Matthew <Matthew.Ferguson@mt.gov<mailto:Matthew.Ferguson@mt.gov>>; Garrett, Connie <Connie.Garrett@mt.gov<mailto:Connie.Garrett@mt.gov>>
> Cc: Elgethun, Kai (ATSDR/DCHI/WB) <irz6@cdc.gov<mailto:irz6@cdc.gov>>; Wendel, Arthur (ATSDR/DCHI/WB) <dvq6@cdc.gov<mailto:dvq6@cdc.gov>>; Stokes IV, Shereitte (CDC/DDPHSIS/CSTLTS/OD) <zyz8@cdc.gov<mailto:zyz8@cdc.gov>>
> Subject: [EXTERNAL] RE: Manganese, Zinc and Copper and their impact on Human Health in Butte. New Information Reported in today's Montana Standard

>
> Hi Laura, these are excellent questions, and they mirror concerns I had. One additional question would concern developing a control group within Montana. I think a better study design would have been to pick a few locations in Montana and see if any group was statistically different.
>
> Could you all send me some availability times for Tues -Thurs of this week, so I can schedule us to meet (Arthur hoping you will be able to join us).
>
> Shereitte/Kai/Arthur, can you think of someone from the EI group who could offer some insight into meconium as a benchmark for environmental exposure?
>
> Best,
> David
>
> From: Williamson, Laura <LWilliamson@mt.gov<mailto:LWilliamson@mt.gov>>
> Sent: Monday, December 2, 2019 10:01 AM
> To: Dorian, David (ATSDR/DCHI/WB) <irs1@cdc.gov<mailto:irs1@cdc.gov>>; Ferguson, Matthew <Matthew.Ferguson@mt.gov<mailto:Matthew.Ferguson@mt.gov>>; Garrett, Connie <Connie.Garrett@mt.gov<mailto:Connie.Garrett@mt.gov>>
> Cc: Elgethun, Kai (ATSDR/DCHI/WB) <irz6@cdc.gov<mailto:irz6@cdc.gov>>; Stokes IV, Shereitte (CDC/DDPHSIS/CSTLTS/OD) <zyz8@cdc.gov<mailto:zyz8@cdc.gov>>
> Subject: FW: Manganese, Zinc and Copper and their impact on Human Health in Butte. New Information Reported in today's Montana Standard
>
> Hi David and Kai,
>
> I hope you both had a nice thanksgiving with family and friends.
>
> The meconium study is sure making waves in Montana and I think we are all struggling to get our heads around it. What do these results mean? Are they valid? Are there exposure pathways that need to be addressed? Etc.
>
> A member of the Butte Health Study Working group suggested that the LHD "...ask the hospital to provide some additional samples to analyze. This would take a while because it will likely need IRB review, but it doesn't have to be a very large effort (maybe 6-12 samples) just to be able to confirm the magnitude of the concentrations." (see email chain below)
>
> I've got lots of questions about whether this is something state or local public health should do. First, is this a valid (or good use of resources) method for biomonitoring to be repeating? Perhaps validating the results (magnitude) is worth repeating, but what lab has validated methods to do such testing? Should public health consider doing other biomonitoring? Do we know enough yet to make that decision? Are there other avenues we should be considering either in partnership with ATSDR or as a state health department?
>
> Do you have time to discuss sometime this week or next?
>
> Thanks.
> Laura
>
>
>
> From: Sullivan, Karen <ksullivan@bsb.mt.gov<mailto:ksullivan@bsb.mt.gov>>
> Sent: Sunday, December 1, 2019 1:41 PM
> To: Williamson, Laura <LWilliamson@mt.gov<mailto:LWilliamson@mt.gov>>
> Subject: [EXTERNAL] FW: Manganese, Zinc and Copper and their impact on Human Health in Butte. New Information Reported in today's Montana Standard
>
> Laura: Can we talk further this week about Roz's suggestions? I would really like your input and if possible, assistance - thanks, Karen
>
> From: Rosalind A. Schoof <rschoof@ramboll.com<mailto:rschoof@ramboll.com>>
> Sent: Tuesday, November 26, 2019 4:39 PM

Ex. 6 PP Public Involvement Advisory Group

Ex. 6 PP Public Involvement Advisory Group

> Cc: Joe Vranka <vranka.joe@epamail.epa.gov<mailto:vranka.joe@epamail.epa.gov>>
> Subject: RE: Manganese, Zinc and Copper and their impact on Human Health in Butte. New Information Reported in today's Montana Standard
>
> [http://www.bsb.mt.gov/ImageRepository/Document?documentID=10315]
> This message did not originate from a Butte-Silver Bow email account and therefore cannot be validated. Please ensure you respond accordingly and proceed with caution.
> John,
> I agree that this study is very, very preliminary; however, I find the results puzzling rather than alarming. There are no data from Butte that suggest historical mining is a source of exposure to zinc, manganese and copper at the magnitude suggested by this study.
>
> The first step I recommend would be to ask Katie to let us have someone review and QC her data, and also ask if she has remaining split samples that EPA could have analyzed.
>
> The second step I recommend is to have the health department ask the hospital to provide some additional samples to analyze. This would take a while because it will likely need IRB review, but it doesn't have to be a very large effort (maybe 6-12 samples) just to be able to confirm the magnitude of the concentrations.
>
> Only once the levels reported in the new paper are confirmed by an independent laboratory would I recommend a more detailed study (that would include more information on the participants and possible sources).
>
> We can add this to our agenda for our call on December 9th.
>
> Regards,
> Roz
>
> Rosalind A. Schoof
> PhD, DABT
> Principal - Seattle
> D +1 206 336-1653
> M +1 206 713-5449
> rschoof@ramboll.com<mailto:rschoof@ramboll.com>
>
> From: John Ray
> Sent: Tuesday, November 26, 2019 4:54 AM

Ex. 6 Personal Privacy (PP)

Ex. 6 PP Public Involvement Advisory Group

<vranka.joe@epamail.epa.gov<mailto:vranka.joe@epamail.epa.gov>>
> Subject: Manganese, Zinc and Copper and their impact on Human Health in Butte. New Information Reported in today's Montana Standard
>
>
> While I realize that the Hailer and McDermott study on zinc, manganese and copper that was reported in today's Montana Standard is very, very, very preliminary, it was shocking to me and should be shocking to all who are interested in Butte's public health to read about the levels of copper, manganese and zinc in infants. While this is a very preliminary pre-study, it does raise concerns.
>

> Interest in these three toxics has been pretty much confined, at best, to the effect on aquatic life, not humans. Arsenic, lead and mercury have driven the human health aspect of the cleanup. Zinc, manganese and copper have flown pretty much under the health radar when it comes to Superfund in Butte.

>
> To point, the following questions are pertinent:

>
> 1. How can the current cleanup plans be amended to include consideration of these three toxics? Do they need to be amended? The consent decree is nearing completion. While we don't know where these individuals reported in the study lived, they may well have lived in the BPSOU operable unit. If so, these toxics should be considered. Also, if some lived in "The Flat," the Westside Soils RI/FS process which is occurring at present should investigate copper, zinc and manganese in the Flat. Failure to do the above would be a serious lapse in protecting public health.

>
> 2. How can active mining be considered in the equation? It is difficult if not impossible to distinguish the results of active mining versus historic mining. But that doesn't lessen the obligation to protect public health. There perhaps needs to be greater attention paid to the environmental effects of active mining, which is largely in the purview of MDEQ. MDEQ has not distinguished itself in this regard. Nevertheless, given the potential effect on the efficacy of the Superfund cleanup of active mining, EPA needs to be actively involved. For example, how many of these people came from the Greeley neighborhood? We don't know but EPA and MDEQ should pay particular attention to that area. There are obviously environmental justice concerns here. How will those be addressed?

>
> 3. How are citizens to make sense out of the conflicting array of health studies that have been released in the past few years? Currently, there are a confusing plethora of health studies all providing partial and contradictory answers to whether or not Butte is a safe place to live and work. These need to be analyzed and synthesized so that some kind of answer can be given as to whether or not Butte is safe when it comes to environmental toxics, whether from historic mining or active mining.

>
> 4. What can be done to address zinc, manganese and copper? They pose a threat to human health, Superfund is supposed to ameliorate such treats, so what will EPA and MDEQ do? Do we need a ROD amendment for BPSOU? Do we need an aggressive public education campaign?

>
> I realize all of this is very preliminary. There is no need for panic. This was not a full blown study. But it raises alarm bells. We need to get out in front of this. We need to be proactive. If we don't respond, the public perception will be that there is a significant issue here. There may be. We need to take the lead on this or the situation will be defined for us and perhaps not in the way we would want. In any event, this is a potentially significant public health issue related to Superfund and needs consideration. We should not just dismiss this information.

>
> Dr. John W. Ray

>
>
>
>
> Messages and attachments sent to or from this email account pertaining to the City-County of Butte-Silver Bow business may be considered public or private records depending on the message content (Article II Section 9, Montana Constitution; 2-6 MCA).
> The content image001.jpg of type image/jpeg has been blocked.